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09/997,093	11/28/2001	Michael Andrews	42390P11143	6119
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BLAKELY SOKOLOFF TAYLOR & ZAFMAN			TRAN, AMY	
12400 WILSHIRE BOULEVARD			ART UNIT	
SEVENTH FLOOR			PAPER NUMBER	
LOS ANGELES, CA 90025-1030			2157	

DATE MAILED: 01/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/997,093

Applicant(s)

ANDREWS ET AL.

Examiner

Amy Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is responsive to the application filed on November 28, 2001. Claims 1-45 are pending examination. Claims 1-45 represent communication protocol for mobile nodes in a network address translation (NAT) domain.

Claim Rejections - 35 USC § 112

2. Claim 27 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 27 recites the limitation "the message " in lines 1- 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-6, 9, 16-19, 21, 24-28, 31-36 and 39 are rejected under 102(e) for being unpatentable over Redlich US Patent No. 6,591,306.

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As to claim 1, Redlich teaches an apparatus to allow a node to locate an agent in a network address translation (NAT) domain, the apparatus comprising:
a network translation device to receive a first request from the node (fig 9, column 20 lines 21-26, column 13 lines 59-67, the access router which has network address translation (NAT) functionality, receive a request from a node);
the network translation device to determine whether an first address of the first request is a non-routable address (fig 18, column 20 lines 28-31, a request's address which is local to network is a no-routable address); and
if so, to discard the first request (fig 18, column 20 lines 28-31, a request's address is local to network and access router takes no action since the request's address is a no-routable address) and to broadcast a message to the agent (fig 18, column 9 lines 8-12, broadcast message to every station on the network).

As to claim 2, Redlich teaches the apparatus of claim 1, Redlich further teaches that the network translation device to forward the first request to a home agent if the first address of the first request is not the non-routable address (fig 18, column 19 lines 8-15, column 20 lines 1-37, if the request' s addressee is non-local station, which is not non-routable, the access router with NAT and GFA functionality forwards the request to home agent 502), the home agent coupled to the network translation device via a wide area network (WAN) (fig 11, fig 18, column 18 lines 48-55, router 502 coupled to access router 900 via communication network Internet 500).

As to claim 3, Redlich teaches the apparatus of claim 1, wherein the node is a mobile node and is either one of a cellular phone, laptop computer, personal digital assistant (PDA), or an Internet table (column 10 lines 32-61, a guest machine could be a desktop computer, a transportable or portable computer, personal digital assistant or the like).

As to claim 4, Redlich teaches the apparatus of claim 1, wherein the agent is a gateway foreign agent (GFA) (fig 18, column 15 line 65-column 16 line 3, column 19 lines 16-30, access router 900 is an gateway foreign agent).

As to claim 5, Redlich teaches the apparatus of claim 1, wherein the network translation device is a router to support NAT and GFA functionality (fig 18, column 13 lines 59-67, column 15 line 65-column 16 line 3, access router 900 has network address translation and gateway foreign agent functionality).

As to claim 6, Redlich teaches the apparatus of claim 1, wherein the first address is a Care of Address (CoA) (column 14 lines 43-47, guest's IP address is replaced with a care-of IP address that belongs to the hosting network).

As to claim 9, Redlich teaches the apparatus of claim 1, wherein the first request is a registration request of the node to the home agent (fig 18, column 20 lines 28-31, ARP request is read as registration request).

As to claim 16, Redlich teaches method for locating an agent for a node in a network address translation (NAT) domain, comprising:

generating a first request from the node; forwarding the first request to a network translation device (fig 9, column 20 lines 21-26, column 13 lines 59-67, the access router which has network address translation functionality, receive a request from a node); and

determining whether a first address of the first request is a non-routable address, if so, deleting the first request (fig 18, column 20 lines 28-31, a request's address is local to network and access router takes no action since the request's address is a no-routable address) and broadcasting a message to the agent (fig 18, column 9-lines 8-12, broadcast message to every station on the network).

As to claim 17, Redlich teaches the method of claim 16, further comprising:

forwarding the first request to a home agent if the first address of the first request is not the non-routable address (fig 18, column 19 lines 8-15, column 20 lines 1-37, if the request' s addressee is non-local station, which is not non-routable, the access router forwards the request to home agent 502), the home agent coupled to the network translation device via a wide area network (WAN) (fig 11, fig 18, column 18 lines 48-55, router 502 coupled to access router 900 via communication network Internet 500).

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As to claim 18, Redlich teaches the method of claim 16, wherein the node is mobile node and is either one of a cellular, laptop computer, personal digital assistant (PDA), or an Internet table (column 10 lines 32-61, a guest machine could be a desktop computer, a transportable or portable computer, personal digital assistant or the like).

As to claim 19, Redlich teaches the method of claim 16, wherein the agent is a gateway foreign agent (GFA) and the network translation device is a router to support NAT and GFA functionality (fig 18, column 13 lines 59-67, column 15 line 65-column 16 line 3, access router 900 has network address translation and gateway foreign agent functionality).

As to claim 21, Redlich teaches the method of claim 16, wherein the first request is a registration request of the node to the home agent (fig 18, column 20 lines 28-31, ARP request is read as registration request).

As to claim 24, Redlich teaches an article comprising:
A storage medium having stored thereon instructions, that, when executed by a computing platform, result in execution of locating an agent for a node in network address translation (NAT) domain (fig 19) by:
generating a first request ;forwarding the first request to a network translation device (fig 9, column 20 lines 21-26, column 13 lines 59-67, the access router which has network address translation functionality, receive a request from a node);

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determining whether a first address of the first request is a non-routable address, if not, forwarding the first request to a home agent (fig 18, column 19 lines 8-15, column 20 lines 1-37, if the request's addressee is non-local station, which is not non-routable, the access router forwards the request to home agent 502), the home agent coupled to the network translation device via a wide area network (WAN) (fig 11, fig 18, column 18 lines 48-55, router 502 coupled to access router 900 via communication network Internet 500).

As to claim 25, Redlich teaches the article of claim 24, further comprising: if the first address of the first request is the non-routable address, deleting the first request and broadcasting a message to the agent (fig 18, column 20 lines 28-31, a request's address is local to network and access router takes no action since the request's address is a no-routable address); and generating a second request wherein a first address of the second request is the address of the network translation device (fig 18, column 18 lines 48-55, column 20 lines 1-37, an outbound IP packet is sent from guest to the foreign network's access router 900 which forward the packet to guest's home router 502, the outbound IP packet is read as second request).

As to claim 26, Redlich teaches the article of claim 24, wherein the node is a mobile node and is either one of a cellular phone, laptop computer, personal digital assistant (PDA), or an Internet table (column 10 lines 32-61, a guest machine could be

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a desktop computer, a transportable or portable computer, personal digital assistant or the like).

As to claim 27, Redlich teaches the article of claim 24 wherein the first address is a Care of Address (CoA) (column 14 lines 43-47, guest's IP address is replaced with a care-of IP address that belongs to the hosting network).

As to claim 28, Redlich teaches the article of claim 24, wherein the first request is a registration request of the node to the home agent (fig 18, column 20 lines 28-31, ARP request is read as registration request of the node to its home agent 502).

As to claim 31, Redlich teaches a method for allowing a node to locate an agent in a network address translation (NAT) domain, the method comprising:
transmitting a first request from the node to a network translation device (fig 9, column 20 lines 21-26, column 13 lines 59-67, the access router which has network address translation functionality, receive a request from a node);
determining whether an first address of the first request is a non-routable address (fig 18, column 20 lines 28-31, a request's address which is local to network is a no-routable address); and if so, deleting the first request and broadcasting a message to the agent (fig 18, column 20 lines 28-31, a request's address is local to network and access router takes no action since the request's address is a no-routable address).

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As to claim 32, Redlich teaches the method of claim 31, further comprising: forwarding the first request from the network translation device to a home agent if the first address of the first request is not the non-routable address (fig 18, column 19 lines 8-15, column 20 lines 1-37, if the request's addressee is non-local station, which is not non-routable, the access router with NAT and GFA functionality forwards the request to home agent 502), the home agent coupled to the network translation device via a wide area network (WAN) (fig 11, fig 18, column 18 lines 48-55, router 502 coupled to access router 900 via communication network Internet 500).

As to claim 33, Redlich teaches the method of claim 31, wherein the node is a mobile node and is either one of a cellular phone, laptop computer, personal digital assistant (PDA), or an Internet table (column 10 lines 32-61, a guest machine could be a desktop computer, a transportable or portable computer, personal digital assistant or the like).

As to claim 34, Redlich teaches the method of claim 31, wherein the agent is a gateway foreign agent (GFA) (fig 18, column 15 line 65-column 16 line 3, column 19 lines 16-30, access router 900 is an gateway foreign agent).

As to claim 35, Redlich teaches the method of claim 31, wherein the network translation device is a router to support NAT and GFA functionality (fig 18, column 13

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lines 59-67, column 15 line 65-column 16 line 3, access router 900 has network address translation and gateway foreign agent functionality).

As to claim 36, Redlich teaches the method of claim 31, wherein the first address is a Care of Address (CoA) (column 14 lines 43-47, guest's IP address is replaced with a care-of IP address that belongs to the hosting network).

As to claim 39, Redlich teaches the method of claim 31, wherein the first request is a registration request of the node to the home agent (fig 18, column 20 lines 28-31, ARP request is read as registration request).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 7-8, 10, 12, 14-15, 20, 22-23, 29-30, 37-38, 40, 42, 44-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Redlich US Patent No. 6,591,306. in view of Borella et al. (hereinafter Borella) US Patent No. 6,816,912.

As to claim 7, Redlich teaches the apparatus of claim 1, Redlich doesn't explicitly teach "mobile agent advertisement unicast message". However, Borella teaches method and system for tunnel optimized call setup for mobile nodes (see abstract). Borella teaches mobile agent advertisement unicast message (column 6 lines 17-18, column 7 lines 54-62).

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Redlich by unicasting a mobile agent advertisement message since doing so would enable broader routing geography.

As to claim 8, Redlich teaches the apparatus of claim 1, Redlich doesn't explicitly teach "a mobile agent advertisement unicast message to a subnet". However, Borella teaches method and system for tunnel optimized call setup for mobile nodes (see abstract). Borella teaches mobile agent advertisement unicast message (column 6 lines 17-18, column 7 lines 54-62).

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Redlich by unicasting a mobile agent advertisement message since doing so would enable broader routing geography.

As to claim 10, Redlich teaches the apparatus of claim 1 and claim 7, wherein Redlich teaches generating a second request with a first address to be derived from an address of the network translation device, and the network translation device to forward the second request to the home agent via the WAN (fig 18, column 18 lines 48-55,

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column 20 lines 1-37, an outbound IP packet is sent from guest to the foreign network 's access router 900 which forward the packet to guest's home router 502, the outbound IP packet is read as second request).

As to claim 12, Redlich teaches the apparatus of claim 1 and claim 8, wherein Redlich teaches generating a second request with a first address to be derived from an address of the network translation device, and the network translation device to forward the second request to the home agent via the WAN (fig 18, column 18 lines 48-55, column 20 lines 1-37, an outbound IP packet is sent from guest to the foreign network 's access router 900 which forward the packet to guest's home router 502, the outbound IP packet is read as second request).

As to claim 14, Redlich teaches the apparatus of claim 1, claim 7 and claim 10, wherein the second request is a registration request of the node to the home agent (fig 18, column 18 lines 48-55, column 20 lines 1-37, an outbound IP packet is sent from guest to the foreign network 's access router 900 which forward the packet to guest's home router 502, the outbound IP packet is read as second registration request).

As to claim 15, Redlich teaches the apparatus of claim 1, claim 8 and claim 12, wherein the second request is a registration request of the node to the home agent (fig 18, column 18 lines 48-55, column 20 lines 1-37, an outbound IP packet is sent from

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guest to the foreign network 's access router 900 which forward the packet to guest's home router 502, the outbound IP packet is read as second registration request).

As to claim 20, Redlich the method of claim 16, wherein the first address is a Care of Address (CoA) (column 14 lines 43-47, guest's IP address is replaced with a care-of IP address that belongs to the hosting network).

Redlich doesn't explicitly teach "mobile agent advertisement unicast message". However, Borella teaches method and system for tunnel optimized call setup for mobile nodes (see abstract). Borella teaches mobile agent advertisement unicast message (column 6 lines 17-18, column 7 lines 54-62).

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Redlich by unicasting a mobile agent advertisement message since doing so would enable broader routing geography.

As to claim 22, Redlich teaches the apparatus of claim 16, wherein generating a second request with a first address to be derived from an address of the network translation device, and the network translation device to forward the second request to the home agent via the WAN (fig 18, column 18 lines 48-55, column 20 lines 1-37, an outbound IP packet is sent from guest to the foreign network 's access router 900 which forward the packet to guest's home router 502, the outbound IP packet is read as second request).

Redlich doesn't explicitly teach "a mobile agent advertisement unicast message to a subnet". However, Borella teaches method and system for tunnel optimized call setup for mobile nodes (see abstract). Borella teaches mobile agent advertisement unicast message (column 6 lines 17-18, column 7 lines 54-62).

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Redlich by unicasting a mobile agent advertisement message since doing so would enable broader routing geography.

As to claim 23, Redlich teaches the apparatus of claim 16 and claim 22 wherein the second request is a registration request of the node to the home agent (fig 18, column 18 lines 48-55, column 20 lines 1-37, an outbound IP packet is sent from guest to the foreign network's access router 900 which forward the packet to guest's home router 502, the outbound IP packet is read as second registration request).

As to claim 29, Redlich teaches the apparatus of claim 24 and 25, Redlich teaches the apparatus of claim 16, wherein generating a second request with a first address to be derived from an address of the network translation device, and the network translation device to forward the second request to the home agent via the WAN (fig 18, column 18 lines 48-55, column 20 lines 1-37, an outbound IP packet is sent from guest to the foreign network's access router 900 which forward the packet to guest's home router 502, the outbound IP packet is read as second request).

Redlich doesn't explicitly teach "a mobile agent advertisement unicast message to a subnet". However, Borella teaches method and system for tunnel optimized call setup for mobile nodes (see abstract). Borella teaches mobile agent advertisement unicast message (column 6 lines 17-18, column 7 lines 54-62).

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Redlich by unicasting a mobile agent advertisement message since doing so would enable broader routing geography.

As to claim 30, Redlich teaches the article of claim 24, 25 and 29 wherein the second request is a registration request of the node to the home agent (fig 18, column 18 lines 48-55, column 20 lines 1-37, an outbound IP packet is sent from guest to the foreign network 's access router 900 which forward the packet to guest's home router 502, the outbound IP packet is read as second registration request).

As to claim 37, Redlich teaches the apparatus of claim 31, Redlich doesn't explicitly teach "mobile agent advertisement unicast message". However, Borella teaches method and system for tunnel optimized call setup for mobile nodes (see abstract). Borella teaches mobile agent advertisement unicast message (column 6 lines 17-18, column 7 lines 54-62).

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Redlich by unicasting a mobile agent advertisement message since doing so would enable broader routing geography.

As to claim 38, Redlich teaches the apparatus of claim 31, Redlich doesn't explicitly teach "a mobile agent advertisement unicast message to a subnet". However, Borella teaches method and system for tunnel optimized call setup for mobile nodes (see abstract). Borella teaches mobile agent advertisement unicast message (column 6 lines 17-18, column 7 lines 54-62).

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Redlich by unicasting a mobile agent advertisement message since doing so would enable broader routing geography.

As to claim 40, Redlich teaches the apparatus of claim 31 and claim 37, wherein Redlich teaches generating a second request with a first address to be derived from an address of the network translation device, and the network translation device to forward the second request to the home agent via the WAN (fig 18, column 18 lines 48-55, column 20 lines 1-37, an outbound IP packet is sent from guest to the foreign network's access router 900 which forward the packet to guest's home router 502, the outbound IP packet is read as second request).

As to claim 42, Redlich teaches the apparatus of claim 31 and claim 38, wherein Redlich teaches generating a second request with a first address to be derived from an address of the network translation device, and the network translation device to forward the second request to the home agent via the WAN (fig 18, column 18 lines 48-55,

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column 20 lines 1-37, an outbound IP packet is sent from guest to the foreign network 's access router 900 which forward the packet to guest's home router 502, the outbound IP packet is read as second request).

As to claim 44, Redlich teaches the method of claim 31, claim 37 and claim 40, wherein the second request is a registration request of the node to the home agent (fig 18, column 18 lines 48-55, column 20 lines 1-37, an outbound IP packet is sent from guest to the foreign network 's access router 900 which forward the packet to guest's home router 502, the outbound IP packet is read as second registration request).

As to claim 45, Redlich teaches the method of claim 31, claim 38 and claim 42, wherein the second request is a registration request of the node to the home agent (fig 18, column 18 lines 48-55, column 20 lines 1-37, an outbound IP packet is sent from guest to the foreign network 's access router 900 which forward the packet to guest's home router 502, the outbound IP packet is read as second registration request).

7. Claims 11, 13, 41, 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Redlich US Patent No. 6,591,306 in view of Borella et al. (hereinafter Borella) US Patent No. 6,816,912 in further view of Doolan US Patent No. 5,764,955.

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As to claim 11, Redlich teaches the apparatus of claim 1 and claim 7, wherein to broadcast the message to the agent (fig 18, column 9 lines 8-12, broadcast message to every station on the network), the network translation device forward a message to the mobile node derived from the second address of the first request (fig 18 column 19 lines 8-16, column 20 lines 1-20, access router 900 reply to the mobile node derived from the predetermined router 502's IP address which is the second address of the first request).

Redlich in view of Borella doesn't explicitly teach "an error code". However, Doolan teaches gateway for using legacy telecommunications network element equipment with a common management information protocol (see abstract). Doolan teaches error code is used to response message to indicate success, failure or translation error (column 15 lines 1- column 16 line 58).

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Redlich in view of Borella by having network translation device forward an error code to the mobile as in Doolan since doing so would ensure reliable mobile IP services.

As to claim 13, Redlich teaches the apparatus of claim 1 and claim 8, wherein broadcast the message to the agent (fig 18, column 9 lines 8-12, broadcast message to every station on the network), the network translation device forward a message to the mobile node derived from the second address of the first request (fig 18 column 19 lines 8-16, column 20 lines 1-20, access router 900 reply to the mobile node derived from the

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predetermined router 502's IP address which is the second address of the first request).

Redlich in view of Borella doesn't explicitly teach "an error code". However, Doolan teaches gateway for using legacy telecommunications network element equipment with a common management information protocol (see abstract). Doolan teaches error code is used to response message to indicate success, failure or translation error (column 15 lines 1- column 16 line 58).

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Redlich in view of Borella by having network translation device forward an error code to the mobile as in Doolan since doing so would ensure reliable mobile IP services.

As to claim 41, Redlich teaches the apparatus of claim 31 and claim 37, wherein broadcast the message to the agent (fig 18, column 9 lines 8-12, broadcast message to every station on the network), the network translation device forward a message to the mobile node derived from the second address of the first request (fig 18 column 19 lines 8-16, column 20 lines 1-20, access router 900 reply to the mobile node derived from the predetermined router 502's IP address which is the second address of the first request).

Redlich in view of Borella don't explicitly teach "an error code". However, Doolan teaches gateway for using legacy telecommunications network element equipment with a common management information protocol (see abstract). Doolan teaches error code

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is used to response message to indicate success, failure or translation error (column 15 lines 1- column 16 line 58).

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Redlich in view of Borella by having network translation device forward an error code to the mobile as in Doolan since doing so would ensure reliable mobile IP services.

As to claim 43, Redlinch teaches the method of claim 31 and claim 38, wherein the network translation device forward a message to the mobile node derived from the second address of the first request (fig 18 column 19 lines 8-16, column 20 lines 1-20, access router 900 reply to the mobile node derived from the predetermined router 502's IP address which is the second address of the first request).

Redlich in view of Borella don't explicitly teach "an error code". However, Doolan teaches gateway for using legacy telecommunications network element equipment with a common management information protocol (see abstract). Doolan teaches error code is used to response message to indicate success, failure or translation error (column 15 lines 1- column 16 line 58).

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Redlich in view of Borella by having network translation device forward an error code to the mobile as in Doolan since doing so would ensure reliable mobile IP services.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

-Short et al. US Patent 6,130,892 discloses nomadic translator router.

-Inoue et al. US Patent 6,515,974 discloses mobile computer communication scheme supporting moving among networks of different address systems.

-Leung US Patent 6,195,705 discloses mobile IP mobility agent standby protocol.

-Korus et al. US Patent 6,721,297 discloses method and apparatus for providing IP mobility for mobile networks.

-Sayers et al. US Patent 6,729,929 discloses method and apparatus for controlling wireless networks.

-Ton US Patent 6,771,623 teaches method for ensuring reliable mobile IP service.

-Akhtar et al. US Patent 6,769,000 discloses unified directory services architecture for an IP mobility architecture framework.

Contact Information

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amy Tran whose telephone number is (571) 272-4243. The examiner can normally be reached on M-F from 8:30am to 5:00pm.

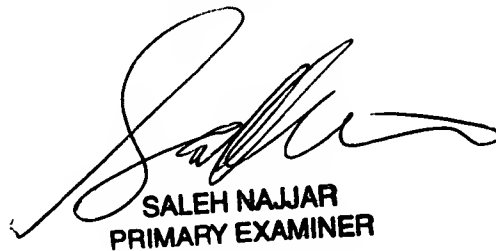
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

at

1/27/05



SALEH NAJJAR
PRIMARY EXAMINER